## **ABSTRACT**

A method and apparatus is provided for controlling the transmit power of an analog modem when the transmit power level does not match the desired transmit power level, thus conforming to FCC regulations on transmit power and/or eliminating non-linearities associated with higher than required power levels and loss of signal-to-noise ratio and concomitant at loss of data rate if the transmit power levels are less than that desired. In one embodiment, the power level at the analog modem is sensed to ascertain if it is not at the desired transmit power level, with adjustment being provided by transmitting the desired change in the transmit power level to the digital modem, whereupon mapping parameters are redefined by adjusting the number of equivalence classes, thus to adjust transmit power at analog modem.